REPORT

ON THE

Viger Copper Mine

CHESTER, C. E.

BY

M. HERBERT WILLIAMS, M. E.

SUPERINTENDANT OF THE HARVEY HILL MINE.

In addition to the Reports already published of Messrs. Petherick and Michel, and the second Report of assays, made by Mr. Chs. Robb, of the ores found on the VIGER-MINE, the proprietors feel a very high satisfaction in being able to lay before the public the present Report of an examination made of the property by Mr. Herbert Williams, M. E., Director of the Harvey-Hill Mine, Leeds, C. E.

A just appreciation of the importance of Mr. H. Williams' opinion may be formed, by the knowledge that the works which he has superintended at the Harvey-Hill Mine are pronounced by Sir Wm. Logan, in his "Geology of Canada" p. 724, "the most extensive which "have as yet been made in the Eastern Townships. "The shafts, and the long adit which has been opened, "afford an opportunity not elsewhere presented for "studying the structure of this mining region, and it "is proposed therefore to give a detailed description "of this mine. The accompanying plan and sections "are reduced from drawings furnished to the Survey ".....by Mr. Herbert Williams, the skilful director of "the Harvey-Hill Mine."

The ores of copper found in Leeds and Chester belong both to the second synclinal of the Quebec group indicated by Sir Wm. Logan, affording thereby to Mr. Herbert Williams a great facility for expressing an opinion, on account of the similarity of the local circumstances.

HARVEY HILL COPPER MINES,

Leeds, Megantic, C. E.

Superintendant's Office, 10th January 1865.

JOSEPH BARSALOU, Esq.,

Montreal.

Sir,

Having, at the request of your Agent, Mr. A. Michel, visited the "Viger Copper Mine" in the Township of Chester, on the 6th instant, I now beg to hand you the following Report of my examination of same.

The nature and extent of the various openings and excavations made on the property having already been carefully detailed in the Reports of Messrs. Petherick and Michel, copies of which, in pamphlet form, were handed me by the latter gentleman, it is not necessary for me to repeat them on the present occasion.

I regret much that the season of the year would not permit of as careful a survey as I should have desired to make of this property. The snow was however cleared from the various openings made, by which was presented to view the best surface indications I have yet seen in the Eastern Townships, fully warranting the outlay of capital to prove the mine in depth, for which purpose some cross-cuts have already been commenced; and I would most strongly recommend that cross-cuts Nos. 4 and 6 should be vigorously pushed on, the very promising appearance at surface of the band or bed of copper-bearing schist,

that these two drifts will intersect, at moderate depths, fully justifying the outlay, with every prospect of finding copper ore in sufficient quantity to be highly remunerative to the adventurers in the undertaking.

The property possesses many natural advantages for economic mining, the high ground in which the bed is situate will admit of being wrought by adit or cross-cut to a very considerable depth.

The works already commenced have been laid out with care and regard to the future economic working of the property.

I may remark, that from the general appearance of the bed as well as the piles of undressed ore at surface, I consider the result of Mr. Robb's assays a very fair approximation of the average per centage of the mass, which can be dressed up to an average of 18 to 20 0/0 at small cost.

The roads being tolerably good, the cost of transport from the mine to the Grand Trunk Railway will not exceed $3 per ton, the distance being about 15 miles only.

I am, Sir,

Your obedient servant,

(Signed,) HERBERT WILLIAMS,

Mining Engineer.